

Chapter 13.28 BACKFLOW PROTECTION AND PREVENTION CODE

13.28.010 Backflow prevention required.

A. An approved backflow prevention method shall be utilized or installed at every service connection to a customer's water system when the utility department determines the potable water supplied by the public potable water system may be subject to contamination, pollution or other deterioration in sanitary quality by conditions within the customer's water system.

B. The backflow prevention method to be utilized or installed shall be determined by the utility department. The method required by the department shall be sufficient to protect against the potential degree of hazard, as determined by the department, to the public potable water supply from the customer's water system.

13.28.020 Hazard potential.

The degrees of hazard potential to the public potable water supply and system from a customer's water supply system shall be determined using the following hazard factors:

A. *Health*: Any condition, device or practice which in the judgment of the utility department, may create a danger to the health and well-being of the potable water consumers.

B. *Plumbing*: A plumbing type cross-connection that is not properly protected by an approved backflow prevention method.

C. *Pollution*: An actual or potential threat to the physical facilities of the public potable water supply system or to the public potable water supply which could constitute a nuisance or could cause damage to the system or its appurtenances.

D. *System*: An actual or potential threat which may cause damage to the physical facilities of the public potable water supply system or which may have a detrimental effect on the quality of the potable water in the system.

13.28.030 Backflow prevention methods; approved; list.

A. A backflow prevention method is any assembly or other means designed to prevent backflow. The following are the recognized backflow prevention methods which the utility department may require.

1. *Air gap*: The unobstructed vertical distance through the free atmosphere between the opening of any pipe or faucet supplying potable water to a tank, plumbing fixture or other device and the flood level rim of said tank, plumbing fixture or other device. An approved air gap shall be at least double the diameter of the supply pipe or faucet and in no case less than one (1) inch.

2. *Reduced pressure principle assembly (hereinafter "RP")*: An assembly containing two (2) independently acting approved check valves together with a hydraulically operating, mechanically independent pressure differential relief valve located between the check valves, below the first check valve. The assembly shall include properly located test cocks and tightly closing shut-off valves at each end of the assembly.

3. *Double check valve assembly (hereinafter "DC")*: An assembly composed of two (2) independently acting, approved check valves, including tightly closing shut-off valves located at each end of the assembly and fitted with properly located test cocks.

4. *Pressure vacuum breaker assembly (hereinafter "PVB")*: An assembly containing an independently operating, located check valve and an independently operating, loaded air inlet valve located on the discharge side of the check valve. The assembly shall be equipped with properly located test cocks and tightly closing shut-off valves located at each end of the assembly.

13.28.040 Backflow assembly installation requirements; location.

A. Backflow prevention assemblies shall be installed by the customer, at the customer's expense and in compliance with the standards and specifications adopted by the city, at the service connection. The assembly shall have a diameter at least equal to the diameter of the service connection.

B. The assembly shall be in an accessible location approved by the utility department. Backflow assemblies shall be installed above ground.

13.28.050 Inspections.

A customer's water system shall be available for inspection by authorized personnel of the utility department. The inspection shall be conducted to determine whether any cross-connections or other hazard potentials exist and to determine compliance with this chapter.

13.28.060 Test; maintenance; records.

A. The customer shall have a certified inspector test and service their backflow prevention assemblies at least once a year. If the testing reveals the assembly to be defective or in unsatisfactory operating condition, the customer shall have any necessary repairs performed, including replacement or overhaul of the assembly, if necessary, which will return the assembly to satisfactory operating condition. Failure by the customer to have their backflow device test annually shall be grounds for discontinuance of water service.

B. If the utility department or customer learns or discovers, during the interim period between tests, that an assembly is defective or in unsatisfactory operating condition, the customer shall perform any necessary repairs, including replacement or overhaul of the assembly, if necessary, which will return the assembly to satisfactory operating condition.

C. Testing shall be performed by a person who is currently certified as a "general" tester by the California-Nevada Section of the American Water Works Association (CA-NV Section, AWWA), the Arizona State Environmental Technical Training (ASETT) Center, or other certifying authority approved by the utility department.

D. The customer shall maintain records, on forms approved by the utility department, of the results of all tests and all servicing, repairs, overhauls or replacements of the backflow prevention assembly. A copy of the records shall be promptly submitted to the department after completion of the activity for which the record is made.

13.28.070 Discontinuance of water service; notice.

- A. The department may disconnect water service to any user who refuses entry or access to water department inspectors for inspection pursuant to Section 13.28.050. Water service may also be disconnected if the customer fails to have their backflow prevention assembly tested and certified annually.
- B. If the department discovers that a user has not installed a required backflow prevention assembly or that a backflow prevention assembly has been improperly tested or maintained, bypassed or removed, or that an unprotected cross-connection exists in the user's water system, the service connection shall be disconnected if the situation is not remedied within the time specified in the notice sent to the user as described in subsection D below. The service connection shall not be restored until the condition is remedied.
- C. Prior to disconnecting any service connection because a condition set forth in subsection A above exists, the department shall send a notice, by certified mail, to the customer describing the condition and notifying the user that the condition must be remedied within thirty (30) days after mailing of the notice by the department. If such condition is not remedied within the thirty-day period, the department shall send a second notice, by certified mail, to the user notifying the customer that water service will be disconnected in ten (10) days if the condition is not remedied within such time period.
- D. The department may disconnect, without notice, water service to any user when the department discovers that the user's water system is contaminating the public potable water supply.

13.28.080 Retroactive application.

- A. The provisions of this chapter shall apply to all new and existing water customers.
- B. Backflow prevention assemblies installed prior to enactment of this ordinance, and which do not comply with the requirements set forth herein, shall be replaced with assemblies which comply with the standards set forth herein.

13.28.090 Plan review.

All backflow prevention assemblies which will be installed shall be shown and specified on all required building and engineering plans. City approval of the intended assembly installation is required prior to issuance of any building or engineering permit.